

Lot 2 Analysis

In September 2001, Earth Spirit Educational Services Inc. completed a yearlong survey of Lot 2 for the purpose of developing these Forest Lands and a former 4H Camp contained within them as part of the new Woodlands Environmental Education Center. This extensive survey, including a detailed resource analysis and management plan, is focused specifically upon utilizing this 852-acre site for day-use and residential environmental education programming. As a result of this prior fieldwork and subsequent management recommendations, it was determined that Lot 2 be excluded from the data collection processes developed for the other Erie County Forest Lands.

For additional information regarding Lot 2, please refer to the publication entitled, “The Woodlands Environmental Education Center – Resource Analysis and Management Plan.” This Plan details analysis in the following general areas:

I. Resource Analysis

- A. History and Land Use Patterns
- B. Habitat Analysis
- C. Soil Survey
- D. Soil Conservation and Land Management

II. Management Plan

- A. Trail Design
- B. Demonstration Gardens
- C. Wildlife Projects

III. Appendix

- A. Land Acquisitions (1928-1963)
- B. Erie County Conservation Management Plan (1965)
- C. Glossary of Soil Management Terms
- D. Wildlife Projects – Supplemental Material

Recommendations

During the past three years, The Woodlands Environmental Education Center has experienced much progress in the areas of both site and program development (see following page). Since Lot 2 is being managed primarily for educational purposes, it is recommended that designated Conifer Plantations be managed using varied techniques (i.e. selective and patch harvests, release cuttings, etc.) in order to promote teaching concepts in the areas of Forest Succession and Management.

The Woodlands Environmental Education Center

General Information

The following information is designed to offer a general overview (present and projected) of The Woodlands Environmental Education Center with regard to the property, partnership and developmental status of the facility.

The Property

The Woodlands Environmental Education Center is comprised of 1000 acres of Erie County Forest lands on Genesee Road in the Town of Sardinia, New York. This property, along with its accompanying structures, was a former seasonal 4-H Camp (1965-1990) which has been in disuse for approximately ten years. The current structures, all requiring renovation and/or reconstruction, include a caretaker's residence and offices, dining hall, nurse's cottage, barn, open shelter and primitive cabins. The land itself is well represented by a variety of unique habitats including northern hardwood forests, conifer plantations, a two acre pond, two major creek systems, marshlands, beaver meadows and open fields.

The Partnership

The Woodlands Environmental Education Center, formally established in the Spring of 2001, was developed as a joint partnership between Erie County Bureau of Forestry (Department of Parks, Recreation and Forestry), Earth Spirit Educational Services, Inc. (a not-for-profit environmental education organization) and The State University of New York at Buffalo (Environmental Studies Program). This unique partnership will assume the following responsibilities:

Erie County Bureau of Forestry – owns, maintains and manages all buildings and grounds

and assists with the development and implementation of all infrastructure and resource management projects.

Earth Spirit Educational Services, Inc. – develops, implements and administers a day-use and residential environmental education program for schools, community groups and the general public of Erie County and all of Western New York.

University at Buffalo – develops a Field Campus for the Environmental Studies Program (and other Natural Science Departments) involving ongoing student internships, field studies coursework and environmental research projects.

Developmental Status

Phase 1: Fall 2000 – Summer 2001

The following tasks were completed during Phase 1 of this project:

- €# General site inventory and clean-up.
- €# A year-long series of Public Programs involving a wide range of Environmental Education field studies.
- €# Repair and reconstruction of the caretaker's residence utilizing existing Erie County resources.



The newly renovated caretaker's residence is one of many building improvements at The Woodlands.



The dining hall at The Woodlands under reconstruction.

- €# Completed the contractual arrangements between Erie County Department of Parks, Recreation and Forestry, Earth Spirit Educational Services, Inc. and the State University of New York at Buffalo.
- €# A Resource Analysis and Management Plan for the site was developed under the auspices of Earth Spirit Educational Services, Inc. and involved the year-long efforts of student interns from the University at Buffalo (Environmental Studies Program).
- €# Earth Spirit Educational Services, Inc. received a full-time AmeriCorps *VISTA volunteer for Summer 2001 to conduct programs and assist with the compilation of the Resource Analysis and Management Plan.
- €# Established a fundraising committee to implement the Management Plan.
- and is also responsible for conducting ongoing programs for the general public.
- €# Received a grant from Waste Management, Inc. to conduct environmental programs in the Spring and Summer of 2003.
- €# Organized a volunteer work crew to assist on a variety of site development projects.
- €# Received a donation from Erie Community College (North Campus) of commercial kitchen equipment valued at approximately \$30,000.
- €# Continued an ongoing series of Public Programs at The Woodlands and other County Lands.
- €# Demolished and disposed of various unsafe structures at The Woodlands with the assistance of both volunteer and Erie County Department of Corrections work crews.
- €# Conducted selected residential school programs at The Woodlands.
- €# Earth Spirit Educational Services, Inc. presently has two full-time AmeriCorps *VISTA volunteers serving as Environmental Educators.
- €# Developed and implemented two University at Buffalo courses entitled Environmental Education Practicums I and II (SSC479/480). In conjunction with this course work, two one-week Ecology Camps were offered to middle/high school students from Erie County.

Phase 2: Fall 2001-Summer 2003

The following tasks were completed during Phase 2 of this project:

- €# Conducted a Fundraiser (Nature Festival) in the Spring of 2002.
- €# Had a caretaker/naturalist move into the newly renovated caretaker's residence. This individual provides a "presence" on the site

The Woodlands Environmental Education Center should be fully functional as a year-round residential facility by the Fall of 2004. At that time, the center will be staffed with Earth Spirit naturalists and University at Buffalo student interns and will, as a result, be the only Residential Center in Western New York that provides both the physical and educational resources for a comprehensive environmental program.

Lot 2

Soils, Waterways and Topography

Soils

The soils on Lot 2 are primarily moderately well drained Mardin Channery Silt Loam (MdB, MdC and MdD), 3-25% slopes, and somewhat poorly drained Volusia Channery Silt Loam (VpA and VpB), 0-8% slopes. These soils occur on the uplands, are potentially highly erodible and have moderate to slow permeability. The well drained, highly erodible Chenango Gravelly Loam (Ckb, CkC and CkD), and Chenango Channery Silt Loam (CIB), with 3-25% slopes, can be found in the floodplain areas, along with the poorly drained, hydric Fluvaquents and Udifluvents (Fu) soils. The well drained, potentially highly erodible Valois Gravelly Silt Loam (VaB), 3-8% slopes, and well drained, highly erodible Valois Gravelly Silt Loam (VaD), 15-25% slopes, are located adjacent to the stream channels. This lot contains many areas of erodible soils and should be maintained to minimize soil disturbance activity.

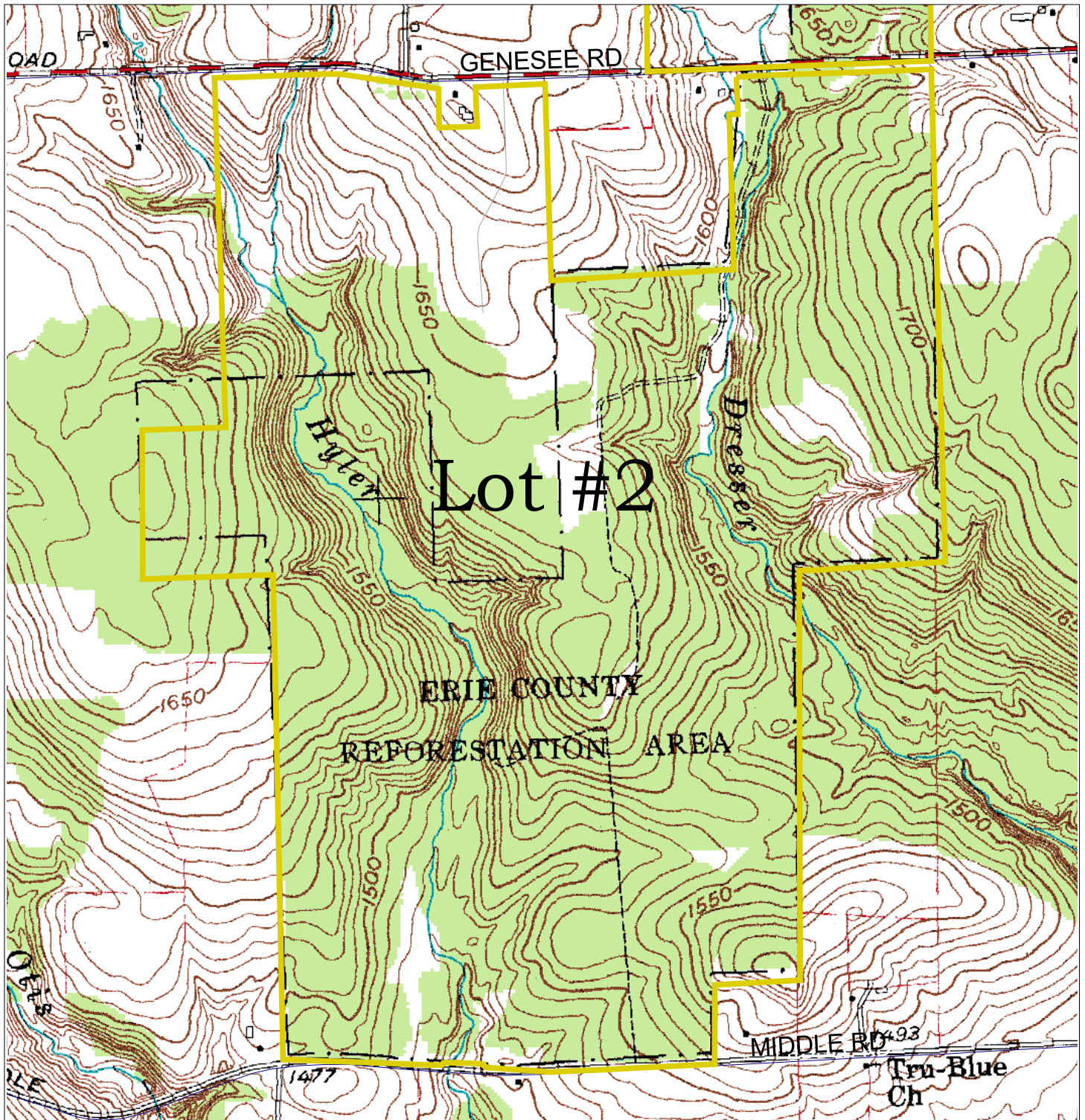
Waterways and Topography

Lot 2 lies south of Genesee Road across from Lot 1, and continues the general slope from north to south. The lot is divided by the south-flowing Dresser Creek and Hyler Creek. The stream channels are generally not restricted, although portions of Hyler Creek have steep banks. The center of the lot rises over 100 feet in elevation between the streams. Both are Class C streams, suitable for fishing and non-contact recreation, and are tributary to Cattaraugus Creek. The primary pollutant of concern in Cattaraugus Creek is streambank erosion, and riparian buffers should be maintained along both streams to minimize degradation of fish habitat.

Lot 2

Forest Stewardship Recommendations

This Lot contains the Woodlands Environmental Education Center facility and 760 acres of conifer plantations and hardwood stands. The DEC did not inspect stands on this Lot for determining recommendations. This Lot has considerable value in usage as demonstration areas for helping people study and understand various techniques of forest management within easy reach of the facilities. The well developed, internal road system allows good access with a variety of stands along the way. Here lies an opportunity to conduct and display small, but complete examples of practices being done or perhaps being considered throughout County Forest land. Such practices as single tree selection, group selection, patch cutting, timber stand improvement, crop tree thinning and grape vine control could be adjacent to areas without treatments for easy study and comparison. The effects of these treatments are sometimes immediate and sometimes long term, both in expression and in duration. Since forest management is a long term activity, these demonstration areas can be handily examined for many years.

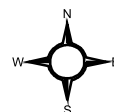


Erie County Forest Management Plan

USGS TOPOGRAPHIC QUADRANGLE

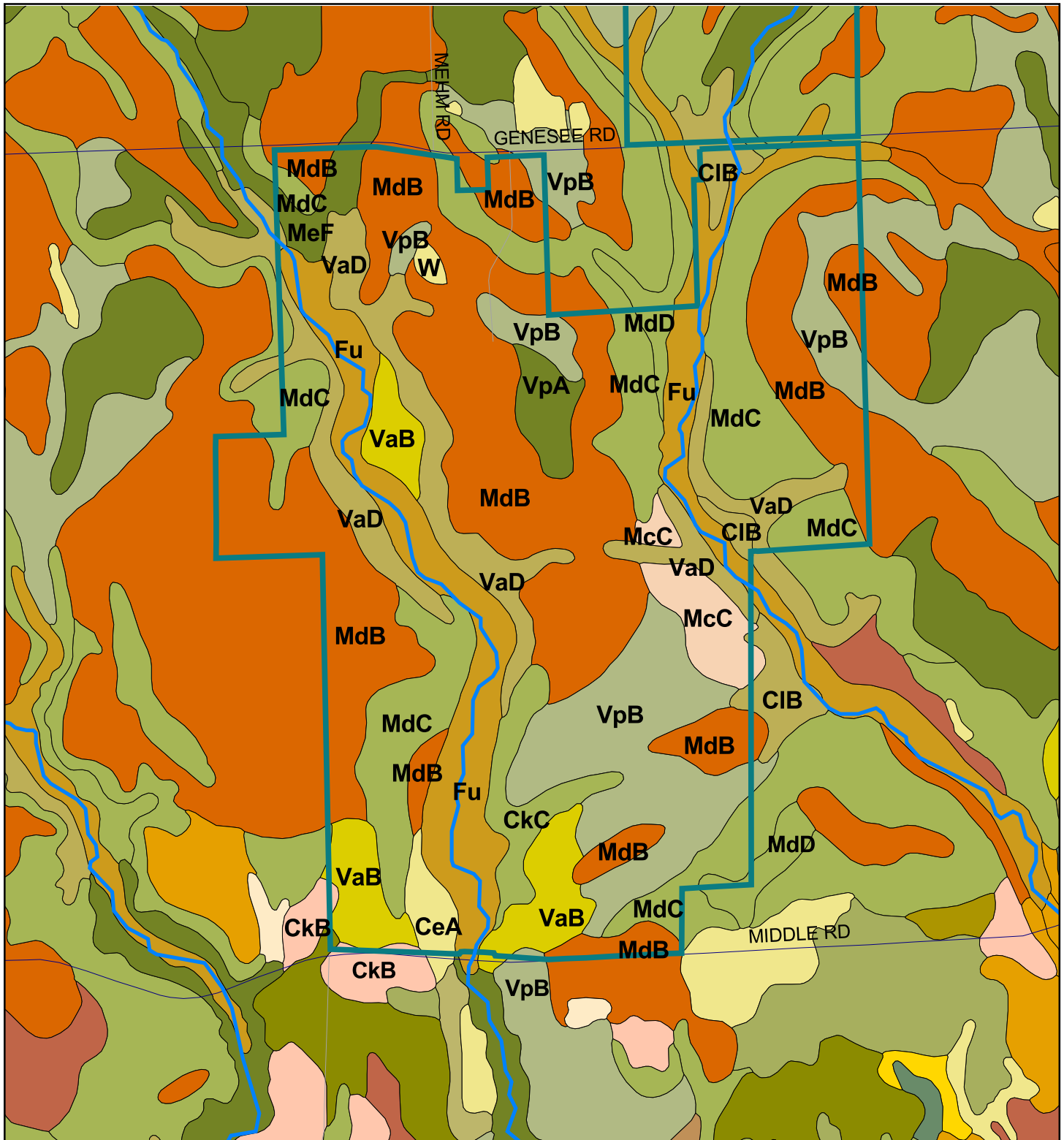


Map Prepared By:
Erie County Soil and Water
Conservation District



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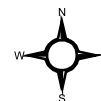


Erie County Forest Management Plan

LOT #2 - SOIL TYPES



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Brief Soil Descriptions – Lot 2

For further information refer to the *Soil Survey of Erie County, New York*.

Symbol

Name / Description

CeA *Castile Gravelly Loam, 0 to 3 Percent Slopes*

Deep, nearly level, moderately well drained, low lime, gravelly loam soil formed mainly in gravel and sand deposits. The available water capacity is low to moderate. Permeability is generally rapid. PRIME FARMLAND, CAPABILITY CLASS-IIw, NYS SOIL GROUP-2b, K=.24, T=3

CkB *Chenango Gravelly Loam, 3 to 8 Percent Slopes*

Deep, gently sloping, well drained, low lime, gravelly loam soil formed mainly in gravel and sand. The available water capacity is low. Permeability is moderate to rapid in the surface soil and subsoil and generally rapid or very rapid in the substratum. PRIME FARMLAND, POTENTIALLY HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIs, NYS SOIL GROUP-2B, K=.24, T=3

CkC *Chenango Gravelly Loam, 8 to 15 Percent Slopes*

Deep, sloping, well drained, low lime, gravelly loam soil formed mainly in gravel and sand. The available water capacity is low. Permeability is moderate to rapid in the surface soil and subsoil and generally rapid or very rapid in the substratum. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIIE, NYS SOIL GROUP-5b, K=.24, T=3

CIB *Chenango Channery Silt Loam, Fan, 3 to 8 Percent Slopes*

Deep, nearly level to gently sloping, well-drained, low lime, channery silt loam soil formed in gravel and sand. The available water capacity is low. Permeability is moderate to rapid in the surface soil and subsoil and generally rapid or very rapid in the substratum. PRIME FARMLAND, POTENTIALLY HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIs, NYS SOIL GROUP-2b, K=.24, T=3

Fu Fluvaquents and Udifluents, Frequently Flooded

Moderately deep to deep, nearly level, well drained to poorly drained, high to low lime, variable soils formed in recent stream deposits. The available water capacity and permeability are variable. No K or T values are assigned. HYDRIC SOIL, CAPABILITY CLASS-Vw, NYS SOIL GROUP-9

McC Mardin Silt Loam, 8 to 15 Percent Slopes

Deep, sloping, moderately well drained and well drained, low lime, silt loam soil formed in coarse loamy glacial till. It has a very firm fragipan at a depth of 16 to 50 inches. The available water capacity is moderate. Permeability is moderate above the fragipan and slow or very slow in the fragipan and substratum. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIie, NYS SOIL GROUP-6b, K=.32, T=3

MdB Mardin Channery Silt Loam, 3 to 8 Percent Slopes

Deep, gently sloping, moderately well drained and well drained, low lime, channery silt loam soil formed in coarse loamy glacial till. It has a very firm fragipan at a depth of 16 to 50 inches. The available water capacity is moderate. Permeability is moderate above the fragipan and slow or very slow in the fragipan and substratum. POTENTIALLY HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIw, NYS SOIL GROUP-4b, K=.24, T=3

MdC Mardin Channery Silt Loam, 8 to 15 Percent Slopes

Deep, sloping, moderately well drained and well drained, low lime, channery silt loam soil formed in coarse loamy glacial till. It has a very firm fragipan at a depth of 16 to 50 inches. The available water capacity is moderate. Permeability is moderate above the fragipan and slow or very slow in the fragipan and substratum. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIie, NYS SOIL GROUP-6b, K=.24, T=3

MdD Mardin Channery Silt Loam, 15 to 25 Percent Slopes

Deep, moderately steep, moderately well drained and well drained, low lime, channery silt loam soil formed in coarse loamy glacial till. It has a very firm fragipan at a depth of 16 to 50 inches. The available water capacity is moderate. Permeability is moderate above the fragipan and slow or very slow in the fragipan and substratum. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IVe, NYS SOIL GROUP-9b, K=.24, T=3

MeF Mardin-Valois Complex, 25 to 50 Percent Slopes

Deep, very steep, well-drained, low lime soil formed in coarse loamy glacial till. The Mardin soil has a very firm fragipan at a depth of 16 to 50 inches. The available water capacity is moderate. Permeability ranges from moderate to slow. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-VIIe, NYS SOIL GROUP-9b, K=.24, T=3

VaB Valois Gravelly Silt Loam, 3 to 8 Percent Slopes

Deep, gently sloping, well drained, low lime, gravelly silt loam soil formed in coarse loamy glacial till. The available water capacity is low to moderate. Permeability is moderate to rapid. PRIME FARMLAND, POTENTIALLY HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIe, NYS SOIL GROUP-2b, K=.24, T=3

VaD Valois Gravelly Silt Loam, 15 to 25 Percent Slopes

Deep, moderately steep, well drained, low lime, gravelly silt loam soil formed in coarse loamy glacial till. The available water capacity is low to moderate. Permeability is moderate to rapid. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IVe, NYS SOIL GROUP-6b, K=.24, T=3

VpA Volusia Channery Silt Loam, 0 to 3 Percent Slopes

Deep, nearly level, somewhat poorly drained, low lime, channery silt loam soil formed in fine loamy glacial till. It has a very firm fragipan at a depth of 15 to 50 inches. The available water capacity is moderate to low. Permeability is generally moderate above the fragipan and slow to very slow in the fragipan. CAPABILITY CLASS-IIIW, NYS SOIL GROUP-6b, K=.24, T=3

VpB Volusia Channery Silt Loam, 3 to 8 Percent Slopes

Deep, gently sloping, somewhat poorly drained, low lime, channery silt loam soil formed in fine loamy glacial till. It has a very firm fragipan at a depth of 15 to 50 inches. The available water capacity is moderate to low. Permeability is generally moderate above the fragipan and slow to very slow in the fragipan. POTENTIALLY HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIIW, NYS SOIL GROUP-6b, K=.24, T=3



1965 CONSERVATION PLAN MAP

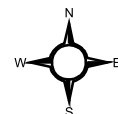
Erie County
Forest Management Plan

LOT #2



Map Prepared By:
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Conservation District

* Basemap Source: 1995 Color IR Orthophotography



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2003 STEWARDSHIP RECOMMENDATION MAP

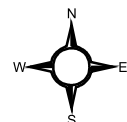
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300 0 300 600 900 Feet



